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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,698	11/25/2003	Zachariah Stockwell	SEAG-STL-11088	3035
91716 7590 08/18/2010 SEAGATE TECHNOLOGY LLC C/O Murabito Hao & Barnes LLP Two North Market Street Third Floor San Jose, CA 95113				
EXAMINER				
ZARE, SCOTT A				
ART UNIT		PAPER NUMBER		
3687				
NOTIFICATION DATE		DELIVERY MODE		
08/18/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

officeaction@mhbpatents.com

### Office Action Summary

**Application No.**

10/720,698

**Applicant(s)**

STOCKWELL ET AL.

**Examiner**

SCOTT A. ZARE

**Art Unit**

3687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

A Non-Final Rejection was mailed on 03/02/2010 in which claims 1-22 were rejected. Applicant has responded by filing Amendments to the Claims accompanied by Remarks, which are now the subject of this Office Action.

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Claims 1-15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins et al.* (US 2002/0188499, referred hereinafter as "*Jenkins*", filed October 29, 2001) in view of *Feldman et al.* (US 2008/0027837, hereinafter "*Feldman*")

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In regard to claims 1, 17, and 20, *Jenkins* teaches a computer-implemented method for distributing parts to customer locations in a volume-based fair share mode, comprising the steps:

- using a processor to prioritize requests for parts from inventory (see paragraphs 178-180);
- using a processor to prioritize locations that have need for the parts (see paragraphs 178-180); and
- using a processor to form a shipment plan by iteratively assigning a defined minimum size allotment of the parts (see paragraph 181 and 189, disclosing "major shipping quantity"; see also paragraph 236; see also paragraph 272, disclosing "recalculat[ing] priority values").

However, *Jenkins* fails to teach iteratively assigning a defined minimum size allotment of parts *to the location having a current priority* and then reprioritizing the priorities of all customer locations and assigning a defined minimum size allotment of the parts to a customer location having a new current priority, until one of all of the parts from inventory have been assigned and no location needs more of the parts assigned.

*Feldman* teaches:

iteratively assigning a defined minimum size allotment of parts to the location having a current priority and then reprioritizing the priorities of all customer locations and assigning a defined minimum size allotment of the parts to a customer location having a new current priority, until one of all of the parts from inventory have been assigned and no location needs more of the parts assigned (see paragraph 42, disclosing “the incremental effect of one-by-one allocation of safety stock units to the Locations 1, 2, 3, the column entitled ‘winning location’ indicating which Location 1, 2 or 3 receives the next additional safety stock unit on the basis of its incremental availability being the greatest an any given prevailing draw allocation,” as illustrated in Fig 9).

It would have been obvious to one of ordinary skill in the art to have modified *Jenkins* to include iteratively assigning a defined minimum size allotment of parts to the location having a current priority as taught by *Feldman* to implement a distribution policy that allocates units “on the basis of relative merit in accordance with an allocation decision criterion subject to one or more constraints rather than in some arbitrary absolute fashion.” See *Feldman*, paragraph 16. Such a feature would improve any distribution method with limited inventory in the same manner.

In regard to claim 2, *Jenkins* teaches a method further comprising defining the minimum size allotment (see paragraph 181 and 189, disclosing “major shipping quantity”).

In regard to claim 3, *Jenkins* fails to teach wherein each location having a need for the parts from inventory has a percentage need for said parts, and wherein the forming a shipment plan includes assigning a minimum size allotment to a priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to a same percentage need.

*Feldman* further teaches:

wherein each location having a need for the parts from inventory has a percentage need for said parts, and wherein the forming a shipment plan includes assigning a minimum size allotment to a priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to the same percentage need assigned (see paragraph 42, disclosing “the incremental effect of one-by-one allocation of safety stock units to the Locations 1, 2, 3, the column entitled ‘winning location’ indicating which Location 1, 2 or 3 receives the next additional safety stock unit on the basis of its incremental availability being the greatest an any given prevailing draw allocation,” as illustrated in Fig 9).

It would have been obvious to one of ordinary skill in the art to have modified *Jenkins* to include iteratively assigning a defined minimum size allotment of parts to the location having a current priority wherein each location has a percentage need for said parts as taught by *Feldman* to implement a distribution policy that allocates units "on the basis of relative merit in accordance with an allocation decision criterion subject to one or more constraints rather than in some arbitrary absolute fashion." See *Feldman*, paragraph 16. Such a feature would improve any distribution method with limited inventory in the same manner.

In regard to claim 4, *Jenkins* further discloses performing a pallet size pass on the shipment plan. (See paragraph 266.)

In regard to claim 5, *Jenkins* discloses a pallet size pass based on a threshold quantity at which multiples of shippers are cut in full pallets. (See paragraph 266.)

In regard to claim 6, *Jenkins* discloses a pallet quantity that is a quantity of parts that constitutes a full pallet. (See paragraph 266.)

In regard to claim 7, *Jenkins* discloses a shipper that passes through the pallet size pass that has a number of parts greater than the threshold quantity and equal to or less than the pallet quantity. (See paragraph 266.)

In regard to claim 8, *Jenkins* discloses a volume based filter pass on the shipment plan. (See paragraph 266.)

In regard to claim 9, *Jenkins* discloses a based filter pass based on a minimum shipment quantity defining a smallest amount of parts for a specific location or part type. (See paragraph 189, disclosing "major ship quantity")

In regard to claim 10, *Jenkins* discloses wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type (see paragraph 206, disclosing "fair-share allocation").

In regard to claim 11, *Jenkins* discloses wherein the parts are shipped from a single source (see Claim 19).

In regard to claim 12, *Jenkins* discloses wherein the parts are shipped from multiple sources, and further comprising determining splitting the source of the parts to fulfill the requests for parts from the locations (see paragraph 224).

In regard to claim 13, *Jenkins* discloses wherein the determining includes forming a balanced supply/demand (See entire disclosure).

In regard to claim 14, *Jenkins* discloses wherein the determining further comprises using geographic/local sales rules in which specified geographic and local sales shipments are prioritized over optimization of shipments (See paragraph 234).

In regard claim 15, *Jenkins* discloses wherein the determining further comprises using a business rule filtering in which specified business rules are prioritized over optimization of shipments (See paragraph 234).

In regard to claim 20, *Jenkins* teaches a system for determining distribution of goods to customer locations, comprising:

a processor that receives requests for parts to be delivered to customer locations (see paragraphs 57-58 and FIGS 1A-1B); and

means for forming a shipment plan of the goods to the customer locations on a volume-based fair share basis (See paragraph 232).

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Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Feldman* in further view of *Chappel* (US 7,236,940).

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In regard to claim 16, the combination of *Jenkins* and *Feldman* fails to disclose creating a set of all supply demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan.

*Chappel* teaches a method and system for accessing and planning business operations utilizing rule-based statistical modeling including creating a set of all supply demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan (See column 7 at lines 45-47, via a statistical business model calculating the sum-of-squares).

It would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify the combination of *Jenkins* and *Feldman* to include the notoriously old and well know methods of statistical modeling as taught by *Chappel* in order to calculate a deviation from a mean, the highest deviation representing the highest priority.

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Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Feldman* in further view of *Benda et al.* (US 6,937,992, referred hereinafter as "*Benda*").

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In regard to claim 18, the combination of *Jenkins* and *Feldman* fails to explicitly disclose performing lot sizing optimization after the shipment plan is formed.

*Benda* teaches a transport vehicle capacity maximization logistics system and method including performing lot sizing optimization after the shipment plan is formed (See col. 11 at lines 56-58, via optimization of pallets for each given SKU).

In view of the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for

order based planning as taught by *Jenkins* and *Feldman* to include optimizing shipments before they are delivered in order to decrease shipping costs. Such a feature would improve any shipping system in the same manner and would provide predictable results.

In regard to claim 19, the combination of *Jenkins* and *Feldman* fails to explicitly disclose splitting the shipping of the parts when there are multiple sources of the parts.

*Benda* teaches a transport vehicle capacity maximization logistics system and method including splitting the source of the parts when there are multiple sources of the parts (See col. 14 at lines 12-14, via merchandise that is shipped from multiple sources being optimized at a cross-dock for shipment to the same distributor).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for order-based planning as taught by the combination of *Jenkins* and *Feldman* to include optimizing shipments before they are delivered in order to decrease shipping costs.

***Response to Arguments***

**Claim Rejections - 35 USC § 112**

Claims 1, 17, and 20 have been amended such that the previously-noted ambiguities have been corrected. Consequently, the previous rejection under 35 USC §112 has been withdrawn.

**Claim Rejections - 35 USC § 102**

Applicant's arguments, see *Remarks*, filed 06/20/2010, with respect to the rejection(s) of claim(s) 1-20 under 35 USC §102 in view of *Jenkins* have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection under 35 USC §103 is made in view of a newly discovered reference, *Feldman*. Consequently, this Office Action is made non-final.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. ZARE whose telephone number is (571)270-3266. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Gart can be reached on (571) 272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A Zare/  
Examiner, Art Unit 3687